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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,245	05/25/2001	Nanami Miki	450100-03244	4576
20999	7590	09/09/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			LAYE, JADE O	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/866,245	MIKI ET AL.	
	Examiner	Art Unit	
	Jade O. Laye	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 2-10 and 12-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1, 2, 6, 11-13, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by *Schein et al.* (US #6,133,909).

As to claim 1, *Schein* discloses a method of searching an EPG database (Col. 1, Ln. 49-56), wherein, via an interface, a user can enter certain attributes (i.e., keywords) (Col. 2, Ln. 18-23), which retrieve information relevant to the entered keyword from the EPG database. (Col. 12, Ln. 66-67 thru Col. 13, Ln. 1-20 & 33-48). Once the relevant information is retrieved, the user selects the desired EPG data. (Col. 13, Ln. 33-48). It's inherent that a "dictionary database"

must be contained within the system of *Schein*. Any system, which allows the user to enter keywords used to retrieve relevant information from the system, must contain a database containing said relevant information. Moreover, the database is accessed based upon the input retrieval keyword and the subsequent subcategory information (i.e., extracted relevant-keyword information) because each is used to retrieve the suggested and/or requested program from the database. Accordingly, each and every limitation of applicant's claim 1 has been anticipated by *Schein*.

Claim 11 is an apparatus claim corresponding to the method claim 1, and is analyzed and rejected as previously discussed.

As to claim 2, *Schein* discloses a method in which the EPG system database stores information relevant to television programs, such as movie titles and directors. (Col. 13, Ln. 33-36). The user can access this information by entering relevant characters or words, which correspond to the desired program to be located. (Col. 13, Ln. 36-48). Therefore, it is inherent that said database contain keywords and words relevant to those keywords, in order to match corresponding terms in response to a user request. Accordingly, each and every limitation of applicant's claim 2 has been anticipated by *Schein*.

As to claim 6, *Schein* discloses a method wherein the retrieval keywords and the relevant-keyword information extracted from the database are interrelated to each other. (Col. 13, Ln. 1-20 & 33-48). Accordingly, each and every limitation of claim 6 is anticipated by *Schein*.

As to claim 12, *Schein*'s system contains a database, which could be located in the set-top box, television, or the like (i.e., client side). (Col. 9, Ln. 21-36). Accordingly, each and every limitation of claim 12 has been anticipated by *Schein*.

As to claim 13, *Schein* teaches a system containing a database, which could be accessed via the internet (i.e., data server side). (Col. 8, Ln. 62-67 thru Col. 9, Ln. 1-9). Accordingly, each and every limitation of claim 13 has been anticipated by *Schein*.

As to claim 19, *Schein*'s EPG includes data relevant to movie information. (Fig. 10). Accordingly, each and every limitation of claim 19 is anticipated by *Schein*.

As to claim 20, *Schein*'s EPG includes data relevant to drama information. (Col. 12, Ln. 17-20). Accordingly, each and every limitation of claim 20 is anticipated by *Schein*.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 3, 8-10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Schein* in view of *Beach et al.* (US Pub. #2003/0014753).

Applicant's claim 3 recites the EPG method of claim 1, wherein the retrieval keyword is the name of a person and the relevant information extracted from the database is one of or a combination of a nickname of said person, the full name of said person, the given name of said person, the name of a group relevant to said person, or another well-known name of said person. As discussed above under paragraph 1, *Schein* contains all limitations of claim 1, but fails to disclose a method, which performs the limitations of claim 3. However, within the same field of endeavor *Beach* discloses an EPG wherein a name could be used as a keyword (Fig. 5). Also, the system can be modified to search any program attribute which could be indexed. (Page 2, Par. [0019]). All of said "relevant-keyword information" listed in applicant's claim 3, could potentially be indexed within *Beach*'s system. Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG system of *Schein* with the expanded indexing capability of *Beach* in order to provide a more extensive and flexible database from which the user could retrieve desired programming.

Applicant's claim 8 recites the EPG of claim 1, wherein the retrieval keyword belongs to a particular genre (category), while the relevant keyword information belongs to a different

genre. As discussed above, *Schein* contains all limitations of claim 1, but fails to disclose the limitations of claim 8. However, within the same field of endeavor, *Beach* discloses a system in which a user can search an actor's name (genre of actor's names) and the system will retrieve all relevant information, which would include movies the actor appeared in (genre of movies). This, in essence, is a method of using a keyword from a certain genre, to retrieve relevant keyword information from a different genre. (Fig. 5 & 6; Page 2 Par. [0022]). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG of *Schein* with the genre teaching of *Beach* in order to provide the user with a more flexible searching tool.

Applicant's claim 9 recites the EPG of claim 8, where when the particular genre is relevant to cooking, while the different genre is relevant to cooks. As discussed above, the combined teachings of *Schein* and *Beach* contain all limitations of claim 8. Specifying the genre as relevant to cooking, while the retrieval keyword is relevant to cooks is an obvious variant of claim 8 (because cooks and cooking could be categorized as different genres under the same logic of claim 8's rejection). Thus, *Schein* and *Beach* contain all limitations of claim 9. (Moreover, cooks and cooking are interrelated and therefore could be analyzed and rejected as based upon the teaching of *Schein* used to reject claim 6. Except here, of course, *Schein* would have to be used in a 103 combination with *Beach*).

Applicant's claim 10 recites the EPG of claim 8, wherein the particular genre is relevant to place names, the different genre is relevant to one of or a combination of neighboring city names, country names, and regional names. As discussed above, the combined teachings of *Schein* and *Beach* contain all limitations of claim 8, but fail to specifically state the limitations

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recited in claim 10. However, claim 10 is an obvious variant of claim 8 because both claims are using a keyword from one genre to retrieve relevant keyword information from another genre. (In the alternative, the recited limitations are interrelated and thus, could be analyzed and rejected as in claim 6) Accordingly, the combined teachings of *Schein* and *Beach* contain all limitations of claim 10.

Applicant's claim 14 recites the EPG system of claim 11, wherein said client downloads and stores the program information. As discussed above, *Schein* contains all limitations of claim 11, but fails to teach whether the client is capable of downloading and storing program information. However, within the same field of endeavor, *Beach* further discloses the client unit is capable of downloading and storing program information. (Page 1, Par. [0018]). Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG of *Schein* with the client side downloading/storing capability of *Beach* in order to provide the client with an efficient method of storing EPG programming.

3. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Schein* in view of *Kanungo et al.* (US #5,966,637).

Applicant's claim 4 recites the EPG method of claim 1, wherein the retrieval keywords and the relevant keyword information is written in hiragana and/or katakana characters used in Japanese writing. As discussed above, *Schein* contains all limitations of claim 1, but fails to disclose a system capable of displaying Japanese language characters. However, within the same field of endeavor, *Kanungo* discloses a system capable of displaying multilingual text on set top boxes (Col. 3, Ln. 54-62), and specifically discusses hiragana and katakana characters. (Col. 1,

Ln. 49-58). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the EPG system of *Schein* with the multilingual set-top box of *Kanungo* in order to provide the user with a system capable of searching and retrieving information via the Japanese language.

Claim 17 is an apparatus claim corresponding to the method claim 4, and is analyzed and rejected as previously discussed.

4. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Schein* in view of *Bohm et al.* (US #5,404,507).

Applicant's claim 5 recites the method of claim 1, wherein when a misspelled retrieval keyword corresponds to a misused character keyword stored in the database, only the relevant-keyword information is used to perform the retrieval. As discussed above under paragraph 1, *Schein* contains all limitations of claim 1, but fails to disclose the limitations of claim 5. However, within the same field of endeavor, *Bohm* (also cited in applicant's IDS) discloses a retrieval system capable of analyzing a misspelled search term. If the user misspells a search term, the system retrieves probable alternative words stored on the database and presents them to the user. The user then selects one of the alternative words in order to retrieve the original desired data. (Col. 2, Ln. 11-29). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the EPG of *Schein* with the database search capability of *Bohm* in order to provide a EPG searching method capable of retrieving desired programming based upon an incorrectly entered search term.

Claim 16 is an apparatus claim corresponding to the method claim 5, and is analyzed and rejected as previously discussed herein.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Schein* in view of *Beach* and further in view of *Livowsky*. (US #6,598,039).

Applicant's claim 7 recites the EPG of claim 1, wherein when part of a retrieval keyword is entered, the entire keyword and the relevant-keyword information are retrieved from a database storing previously input keywords in a predetermined order. As discussed above, *Schein* contains all limitations of applicant's claim 1, but fails to specifically disclose the limitations of claim 7. However, within the same field of endeavor, *Beach* discloses an EPG system whereby the system can retrieve keywords and relevant keywords based only upon entering a single character (i.e. part of a keyword). (Fig. 4, and Page 2 Par. [0021]), but fails to disclose whether the system is capable of storing previously entered keywords in a predetermined order. However, within the same field of endeavor, *Livowsky* discloses a method of searching a database, whereby the database "learns" from a user's past entries (i.e., keywords) and updates the database accordingly. (Col. 2, Ln. 26-33 ; Col. 8, Ln. 8-15). Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to combine the modified teachings of *Schein* and *Beach* with the "learning" capability of *Livowsky*'s database in order to provide the user with a more expansive and flexible searching tool, which would be capable of updating the database.

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6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Schein* in view of *Livowsky*. (US #6,598,039).

Applicant's claim 15 recites the EPG system of claim 11, wherein the client access a necessary part of the data server via a routing server, which stores route information for the data server. As discussed above, *Schein* contains all limitations of applicant's claim 11, but fails to disclose the additional limitations of claim 15. However, within the same field of endeavor, *Livowsky* discloses a searching database wherein the user accesses the desired portion of the system database (i.e., data server) via a system server, which distributes (i.e., routes) the search requests among core engines. (Col. 2, Ln. 44-57 ; Col. 4, Ln. 1-12 & 30-36). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the EPG of *Schein* with the multiple server system of *Livowsky* in order to provide a more efficient searching system.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Schein* in view of *Lee et al.* (US #6,463,428).

Applicant's claim 18 recites the EPG system of claim 11, wherein said dictionary database stores previously input keywords so that the input keywords are included in the relevant-keyword information, and the stored keywords are arranged in order of frequency of use. As discussed above, *Schein* contains all limitations of claim 11, but fails to teach the limitations of claim 18. However, within the same field of endeavor, *Lee et al* discloses a system capable of storing keywords and ranking them based upon their frequency of use. (Col. 5, Ln. 8-16 ; Col. 15, Ln. 10-64 ; Fig. 18). Accordingly, it would have been obvious to one ordinarily

skilled in this art at the time of applicant's invention to combine the EPG of *Schein* with the keyword storage capability of *Lee et al* in order to provide the user with a more efficient searching system.

8. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Schein*.

Applicant's claim 21 recites the EPG system of claim 11, wherein the program information includes data relevant to place names. As discussed above, *Schein* contains all limitations of claim 1. Specifically, *Schein* discloses a method of searching an EPG database (Col. 1, Ln. 49-56), wherein, via an interface, a user can enter certain attributes (i.e., keywords) (Col. 2, Ln. 18-23), which retrieve information relevant to the entered keyword from the EPG database. (Col. 12, Ln. 66-67 thru Col. 13, Ln. 1-20 & 33-48). Once the relevant information is retrieved, the user selects the desired EPG data. (Col. 13, Ln. 33-48). But, *Schein* fails to specifically disclose whether the program information retrieved can be relevant to place names. However, since *Schein*'s system can retrieve any information contained on the database which is relevant to the keyword, it would have been obvious that this information could contain data relevant to place names if the user entered a keyword related to a place name. For example, if a user enters "Cowboys" as a keyword, *Schein*'s system would likely retrieve a Dallas Cowboys football game to be played in Texas. Or, if a user were to input "geographic", *Schein*'s system would likely retrieve any programs listed on the geography channel, some of which would be relevant to place names. In essence, would have been obvious that *Schein*'s system could retrieve data relevant to place names because it is highly likely various programs listed on the

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database are related to or contain place names. Thus, *Schein* contains all limitations of applicant's claim 21.

Although claim 22 does not correspond to claim 21, it is analyzed and rejected accordingly because it contains the same elemental structure.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Rothmuller (US #5,635,989) discloses a method and apparatus for sorting and searching a television program guide.
- b. McClard (US #6,438,752) discloses a method and system for selecting television programs based on the past selection history of an identified user.
- c. Legall et al (US #6,005,565) disclose an integrated searching EPG guide for various programming resources
- d. Burns et al (US #5,454,106) disclose a database retrieval system utilizing natural language to present understood components of an ambiguous search query.
- e. Pederson et al (US #5,278,980) disclose an information retrieval system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (571) 272-7303. The examiner can normally be reached on Mon. 7:30am-4, Tues. 7:30-2, W-Fri. 7:30-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Jade O. Laye
September 2, 2005.



NGOC-YEN VU
PRIMARY EXAMINER